

Serial No. 10/790,571

was obvious to one skilled in the art at the time of the invention when considering the Examiner's cited 35 USC §102(b) prior art LEHDE (US 2,807,734), in combination with each of the following, respectively:

CRAMER (US 5,763,973); or DELANCEY (US 2,230,717); or FIELDS (US 6,041,571); or O'BRIEN (US 5,736,798); or ROUNDS (US 6,084,322); or FIELDS and KRASNOW (US 3,083,311);

the Examiner agreed that since the invention has been clarified to claim the use of permanent magnets on only one of the two rotary members claimed, and that therefore, the Examiners cited 35 USC 102(b) prior art no longer anticipates the invention [which included LEHDE], then it follows that all of the Examiner's 35 USC §103(a) rejections based on 'obviousness' combinations with the aforesaid cited 35 USC 102(b) prior art [LEHDE] are no longer valid, since now, any combination with LEHDE, would necessarily teach away from the applicant's invention.

Reference is made to the record Examiner's Interview Summary (Form PTOL-413) dated November 29, 2005, indicating agreement with respect to the claims.

**IN THE SPECIFICATION:**

1. Please cancel the entire specification section labeled **Abstract of the Disclosure**, and replace with the following paragraph:

## ABSTRACT

An apparatus for transferring torque magnetically with a primary rotary member and a secondary rotary member. The primary rotary member has permanent magnets, the secondary rotary member with electro-conductive materials. The secondary rotary member also having magnetically permeable material. The secondary rotary member is placed partially or totally inside the primary rotating member. This causes the two rotary members to axially overlap one another more or less as desired. Rotation of the primary rotary member causes rotation of the secondary rotary member, since magnetic flux lines emanating from the permanent magnets mounted on the primary rotating member, cut through all, or part of, the electro-conductive material placed on the secondary rotary member. This can vary the torque transmitted between the two rotary members, thereby enabling the varying of the rotational speed of the secondary rotary member relative to the primary rotary member.

2. Please cancel the entire specification section labeled **Brief Summary of the Invention**, and replace with the following paragraph:

## BRIEF SUMMARY OF THE INVENTION

The present invention utilizes permanent magnets to transmit variable or fixed torque between two rotating elements. The aforesaid permanent magnets are located on only one of the two rotating elements (also referred to as “rotors” or “rotary members”), and the other rotating element in a particular embodiment does not contain permanent magnets, but does have so-called “electro-conductive” elements. Said electro-conductive elements comprise materials

and alloys that are not permanent magnets, but that allow electron flow through them. In addition, so-called “magnetically permeable” materials are also contained on the said rotors, said magnetically permeable materials comprising substances that allow magnetic flux penetration. The torque between the aforesaid two rotating elements is adjusted by mechanically varying the amount of magnetic flux passing between the elements by varying the extent to which the elements are axially overlapped. In a preferred embodiment of the apparatus, two concentric cylinders, one containing one or more rows of permanent magnets, is moved axially in order to progressively axially overlap a second cylindrical element containing electro-conductive elements and magnetically permeable elements, but not containing permanent magnets. This progressive axial overlapping of the two cylinders allows variation in the amount of magnetic flux intersecting the two concentric cylinders. This causes the amount of induced electrical current in the cylinder containing the electro-conductive elements to vary, which then causes the induced counter magnetic forces to vary. The magnetic forces and, thus, torque transmitted will vary based on the amount of axial overlap.

The proposed invention overcomes previous limitations by taking advantage of new technologies in magnet materials and provides a stable means of mechanically varying large amounts of transmitted torque without the need for large external current controls.

3. Please amend the title of the specification section labeled **Detailed Description of the Invention** and replace with:  
  
**Detailed Description of the Preferred and Alternate Embodiments of the Invention**